IN THE CLAIMS

COMPLETE LISTING OF ALL CLAIMS, WITH MARKINGS AND STATUS IDENTIFIERS
(Currently amended claims showing deletions by ~~strikethrough~~ and additions by underlining)

This listing of claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

1. (original) A method for detecting compounds useful for the prophylaxis and/or treatment of Hepatitis C virus infections comprising:
   a) contacting a test compound with the human cellular protein gastrointestinal glutathione peroxidase; and
   b) detecting human cellular protein gastrointestinal glutathione peroxidase activity.

2. (original) A method for detecting Hepatitis C virus infections in an individual comprising:
   a) providing a sample from said individual; and
   b) detecting activity in said sample of human cellular protein gastrointestinal glutathione peroxidase.

3. (original) A method for detecting Hepatitis C virus infections in cells, cell cultures, or cell lysates comprising:
   a) providing said cells, cell cultures, or cell lysates; and
   b) detecting activity in said cells, cell cultures, or cell lysates of human cellular protein gastrointestinal glutathione peroxidase.

4. (original) A method for preventing and/or treating Hepatitis C virus infection and/or diseases associated with HCV infection in an individual comprising the step of administering a pharmaceutically effective amount of an agent which activates at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or which activates or stimulates at least partially the production of said human cellular protein gastrointestinal glutathione peroxidase.

5. (original) A method for preventing and/or treating Hepatitis C virus infection in cells, cell cultures, or cell lysates comprising the step of administering a pharmaceutically effective amount of an agent which activates at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or which activates or stimulates at least partially the production of said human cellular protein gastrointestinal glutathione peroxidase.

6. (original) A method for regulating the production of Hepatitis C virus in an individual comprising the step of administering to an individual a pharmaceutically effective amount of an agent wherein said agent activates at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or wherein said agent at least partially activates or stimulates the production of said human cellular protein gastrointestinal glutathione peroxidase.

7. (original) A method for regulating the production of Hepatitis C virus in cells, cell culture, or cell lysates comprising the step of administering a pharmaceutically effective amount of an agent wherein said agent activates at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or wherein said agent at least partially activates or stimulates the production of said human cellular protein gastrointestinal glutathione peroxidase in the cells or cell culture.

8. (original) A method for regulating the expression of the human cellular protein gastrointestinal glutathione peroxidase in an individual comprising the step of administering to the individual a pharmaceutically effective amount of an agent wherein said agent activates at least partially the transcription of DNA and/or the translation of RNA encoding said human cellular protein gastrointestinal glutathione peroxidase.

9. (original) A method for regulating the expression of the human cellular protein gastrointestinal glutathione peroxidase in cells or cell culture comprising the step of administering to the cells or cell culture a pharmaceutically effective amount of an agent wherein said agent activates at least partially the transcription of DNA and/or the translation of RNA encoding said human cellular protein gastrointestinal glutathione peroxidase.

10. (original) A method for preventing and/or treating Hepatitis C virus infection and/or diseases associated with HCV infection in an individual who fails to respond to interferon therapy, said

method comprising the step of administering a pharmaceutically effective amount of an agent which activates at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or which activates or stimulates at least partially the production of said human cellular protein gastrointestinal glutathione peroxidase.

11. (original) The method according to Claims 4-10, wherein said agent is a combination selected from the group consisting of selenium, selenium salts, Vitamin D3, and retinoids, including 9-cis retinoic acid, salts of 9-cis retinoic acid, C1 - C10 alkyl esters of 9-cis retinoic acid, salts of C1 - C10 alkyl esters of 9-cis retinoic acid, C1 - C10 alkyl amides of 9-cis retinoic acid, salts of C1 - C10 alkyl amides of 9-cis retinoic acid, 13-cis retinoic acid, salts of 13-cis retinoic acid, C1 - C10 alkyl esters of 13-cis retinoic acid, salts of C1 - C10 alkyl esters of 13-cis retinoic acid, C1 - C10 alkyl amides of 13-cis retinoic acid, salts of C1 - C10 alkyl amides of 13-cis retinoic acid, retinol, retinoic acid adlehyde, etretinate, N-(4-hydroxyphenyl) retinamide (4-HPR), 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphthalene carboxylic acid (CD437; AHPN), all-trans-retinoic acid, C1 - C10 esters and amides of all-trans-retinoic acid, paraquat, 4-[E-2-(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)-1-propenyl]benzoic acid, 4-hydroxyphenylretinamide, and 4-[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)carboxamido]benzoic acid.

12. (original) The method according to Claim 11, wherein said combination comprises selenium and all-trans-retinoic acid, 9-cis retinoic acid, or 13-cis retinoic acid.

13. (original) The method according to Claim 11, wherein said combination further includes alpha interferon.

14. (original) The method according to Claim 11, wherein said combination further includes ribavirin.

15. (original) A method for preventing and/or treating Hepatitis C virus infection and/or diseases associated with HCV infection in an individual comprising the step of administering a pharmaceutically effective amount of an agent which inhibits at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or which inhibits at least partially the production of said human cellular protein gastrointestinal glutathione peroxidase.

16. (original) A method for preventing and/or treating Hepatitis C virus infection in cells, cell cultures, or cell lysates, comprising the step of administering a pharmaceutically effective amount of an agent which inhibits at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or which inhibits at least partially the production of said human cellular protein gastrointestinal glutathione peroxidase.

17. (original) A method for regulating the production of Hepatitis C virus in an individual comprising the step of administering to an individual a pharmaceutically effective amount of an agent wherein said agent inhibits at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or wherein said agent at least partially inhibits the production of said human cellular protein gastrointestinal glutathione peroxidase.

18. (original) A method for regulating the production of Hepatitis C virus in cells, cell culture, or cell lysates comprising the step of administering a pharmaceutically effective amount of an agent wherein said agent inhibits at least partially the activity of said human cellular protein gastrointestinal glutathione peroxidase or wherein said agent at least partially inhibits the production of said human cellular protein gastrointestinal glutathione peroxidase in the cells or cell culture.

19. (original) A method according to any one of claims 15-18, wherein the agent is a monoclonal or polyclonal antibody which binds to said human cellular protein gastrointestinal glutathione peroxidase.

20~~21~~. (currently amended) A method according to any one of Claims 15-18, wherein said agent comprises oligonucleotides that bind to the DNA or RNA encoding the human cellular protein gastrointestinal glutathione peroxidase.

21~~22~~. (currently amended) A method for regulating the expression of the human cellular protein gastrointestinal glutathione peroxidase in an individual comprising the step of administering to the individual a pharmaceutically effective amount of an agent wherein said agent inhibits at least partially the transcription of DNA and/or the translation of RNA encoding said human cellular protein gastrointestinal glutathione peroxidase.

2223. (currently amended) A method for regulating the expression of the human cellular protein gastrointestinal glutathione peroxidase in cells or cell culture comprising the step of administering to the cells or cell culture a pharmaceutically effective amount of an agent wherein said agent inhibits at least partially the transcription of DNA and/or the translation of RNA encoding said human cellular protein gastrointestinal glutathione peroxidase.

2324. (currently amended) A method according to any one of Claims 22 or 23, wherein said agent is an oligonucleotide which binds to the DNA and/or RNA encoding the human cellular protein gastrointestinal glutathione peroxidase.

2425. (currently amended) A method for selective killing of HCV infected cells in an individual comprising the step of administering to the individual a pharmaceutically effective amount of a radical initiator which is capable of generating artificial oxidative stress conditions within the cells.

2526. (currently amended) A method for selective killing of HCV infected cells comprising the step of administering to the cells a pharmaceutically effective amount of a radical initiator which is capable of generating artificial oxidative stress conditions.

2627. (currently amended) The method according to Claims 25 or 26, wherein the radical initiator is selected from the group consisting of paraquat, 2,2'-bipyridyl, 4,4'-bipyridyl derivatives, bis-6-(2,2'-bipyridyl)-pyrimidines, tris-(2,2'-bipyridyl)-ruthenium, dibenzoylperoxide, diacetylperoxide, hydrogen peroxide, di-tert.-butylperoxide, and diazaisobutyronitril.

2728. (currently amended) A method for preventing and/or treating HCV infections in an individual by at least partially compensating the down-regulation of GI-GPx comprising the step of administering to the individual a pharmaceutically effective amount of at least one antioxidant which is capable of supporting the function of GI-GPx present within the cells.

2829. (currently amended) A method for preventing and/or treating HCV infections in cells by at least partially compensating the down-regulation of GI-GPx comprising the step of administering to the cells or cell culture a pharmaceutically effective amount of at least one antioxidant which is capable of supporting the function of GI-GPx present within the cells.

2930. (currently amended) The method according to Claims 28 or 29, wherein the antioxidant is selected from the group consisting of vitamin E (DL-a-tocopherol), vitamin C (L-ascorbic acid), co-enzyme Q10, zinc, selenium, N-acetyl-L-cycteine, N-acetyl-S-farnesyl-L-cysteine, Bilirubin, caffeic acid, CAPE, catechin, ceruloplasmin, Coelenterazine, copper diisopropylsalicylate, deferoxamine mesylate, R-(-)-deprenyl, DMNQ, DTPA dianhydride, Ebselen, ellagic acid, (-)-epigallocatechin, L-ergothioneine, EUK-8, Ferritin, glutathione, glutathione monoethylester, a-lipoic acid, Luteolin, Manoalide, MCI-186, MnTBAP, MnTMPyP, morin hydrate, NCO-700, NDGA, p-Nitroblue, propyl gallate, Resveratrol, rutin, silymarin, L-stepholidine, taxifolin, tetrandrine, tocopherol acetate, tocotrienol, Trolox®, U-74389G, U-83836E, uric acid, carboxylic acids, citric acid, phenolic compounds, BHA (butylated hydroxyanisole), BHT (butylated hydroxytoluene), propyl gallate, TBHQ (tert-butyl hydroquinone), tocopherols, lecithin, gums, resin guiac, THBP (trihydroxybutyrophenone), thiodipropionic acid, dilauryl thiodipropionate, and glycines.

3031. (currently amended) A method for regulating the activity of the human cellular protein gastrointestinal glutathione peroxidase in an individual comprising the step of administering to the individual a pharmaceutically effective amount of an agent wherein said agent interacts with said human cellular protein gastrointestinal glutathione peroxidase.

3132. (currently amended) A method for regulating the activity of the human cellular protein gastrointestinal glutathione peroxidase in cells or cell culture comprising the step of administering to the cells or cell culture a pharmaceutically effective amount of an agent wherein said agent interacts with said human cellular protein gastrointestinal glutathione peroxidase.

3233. (currently amended) The method according to Claim 31 or 32, wherein the agent is selected from the group comprising small chemical molecules which are organic compounds having a molecular weight below 500 g/mol, interferons, aptamers, antioxidants, and radical initiators.

3334. (currently amended) A composition useful for the prophylaxis and/or treatment of an individual afflicted with Hepatitis C virus and/or diseases associated with HCV infection, said composition comprising at least one agent capable of inhibiting activity of said human cellular protein

gastrointestinal glutathione peroxidase or capable of decreasing the expression of said human cellular protein gastrointestinal glutathione peroxidase.

34~~35~~. (currently amended) A composition useful for the prophylaxis and/or treatment of an individual afflicted with Hepatitis C virus and/or diseases associated with HCV infection, said composition comprising at least one agent capable of increasing the activity of said human cellular protein gastrointestinal glutathione peroxidase or capable of activating or stimulating the expression of said human cellular protein gastrointestinal glutathione peroxidase.

35~~36~~. (currently amended) The composition according to claim 34 or 35, further comprising pharmaceutically acceptable carriers, excipients, and/or diluents.